



Rec'd PCT/PTO

09673274.020201

18 DEC 2001

479

SEQUENCE LISTING

<110> LAMBERTY, MIREILLE
BULET, PHILLIPE
BROOKHART, GARY
HOFFMAN, JULES

<120> GENE CODING FOR HELIOMICINE, AND USE
THEREOF

<130> A33595-PCT-USA

<140> 09/673,274.

<141> 1999-04-12

<150> PCT/FR99/00843

<151> 1999-04-12

<150> FR 98 04933

<151> 1998-04-15

<160> 38

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 147

<212> DNA

<213> Artificial Sequence

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<223> SYNTHETIC POLYNUCLEOTIDE

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agcttgata aaagagacaa gttgattggc agctgtgttt ggggcgccgt caactacact 60
agtgaactgca acggcgagtg caagcgccgc ggttacaagg gtggccattg tggatccttc 120
gctaacgtta actgttggtg tgaaacc 147

<210> 2

<211> 169

<212> DNA

<213> Artificial Sequence

<220>

<223> SYNTHETIC POLYNUCLEOTIDE

<400> 2

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gagtgcaaga ggaggggtta caagggtggt cactgcggtt ctttcgctaa cgtgaactgc 120
tggtgcgaga cttgagagct cggcgaggcg aacgtgtcga cggatccgg 169

<210> 3

<211> 261

<212> DNA

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<223> SYNTHETIC POLYNUCLEOTIDE

<400> 3

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gtgctgtgaa ctacacttcc gattgcaacg gtgagtgcaa gaggaggggt tacaaggggtg 180
gtcactgcgg ttccttcgct aacgtgaact gctggtgcga gacttgagag ctcggcgagg 240
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<223> SYNTHETIC POLYNUCLEOTIDE

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<211> 75

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<400> 5

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ctcttcttct tttcc                                     75
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<211> 72

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<213> Artificial Sequence

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<223> SYNTHETIC POLYNUCLEOTIDE

<400> 6

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aaagatggaa gc                                     72
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<210> 7

<211> 80

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<213> Artificial Sequence

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<223> SYNTHETIC POLYNUCLEOTIDE

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gagtgaaga ggaggggtta 80

<210> 8

<211> 109

<212> DNA

<213> Artificial Sequence

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<223> SYNTHETIC POLYNUCLEOTIDE

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tagcgaagga accgcagtga ccacccttgt aaccctcct cttgcactc 109

<210> 9

<211> 85

<212> DNA

<213> Artificial Sequence

<220>

<223> SYNTHETIC POLYNUCLEOTIDE

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ctctagagtc gacctgcagg catgc 85

<210> 10

<211> 66

<212> DNA

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<211> 93

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gctcgagggc ccaacctcag tacctgggtc agg 93

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<210> 13
<211> 50
<212> DNA
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<210> 14
<211> 50
<212> DNA
<213> Artificial Sequence

<220>
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<210> 15
<211> 81
<212> DNA
<213> Artificial Sequence

<220>
<223> SYNTHETIC POLYNUCLEOTIDE

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atcgtgcacg gcgccgaatt c 81

<210> 16
<211> 24
<212> DNA

<213> Artificial Sequence

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<223> SYNTHETIC POLYNUCLEOTIDE

<400> 16

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24

<210> 17

<211> 32

<212> DNA

<213> Artificial Sequence

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<223> SYNTHETIC POLYNUCLEOTIDE

<400> 17

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32

<210> 18

<211> 213

<212> DNA

<213> Artificial Sequence

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<223> SYNTHETIC POLYNUCLEOTIDE

<400> 18

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gattgcaacg gtgagtgcaa gaggaggggt tacaaggggt gtcactgcgg ttccttcgct 180
aacgtgaact gctggtgcga gacttgactc gag 213

<210> 19

<211> 838

<212> DNA

<213> Artificial Sequence

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<221> promoter

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<221> misc_structure

<222> (533)...(568)

<221> terminator

<222> (569)...(832)

<400> 19

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ctatgttcaa aaatgaagaa tgtacagata caagatccta tactgccaga atacgaagaa 180
gaatacgtag aaattgaaaa agaagaacca ggcgaagaaa agaattctga agacgtaagc 240
actgacgaca acaatgaaaa gaagaagata aggtcgggtga ttgtgaaaga gacatagagg 300
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aaggaaccaa gttcggcatt tgtgaaaaca agaaaaaatt tgggtgtaagc ttttttcttt 480
gaagtactga ggatacaact tcagagaaat ttgtaagttt gtagatctcg attctagaag 540
gcctgaattc gagctcggta ccggatccaa ttcccgatcg ttcaaactt tggcaataaa 600
gtttcttaag attgaatcct gttgccggtc ttgcgatgat tatcatataa tttctgttga 660
attacgttaa gcatgtaata attaacatgt aatgcatgac gttatttatg agatgggttt 720
ttatgattag agtcccgcga ttatacattt aatacgcgat agaaaacaaa atatagcgcg 780
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<210> 20

<211> 1036

<212> DNA

<213> Artificial Sequence

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<223> SYNTHETIC POLYNUCLEOTIDE

<221> promoter

<222> (7)...(532)

<221> CDS

<222> (539)...(736)

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<222> (767)...(1030)

<400> 20

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ctatgttcaa aaatgaagaa tgtacagata caagatccta tactgccaga atacgaagaa 180
gaatacgtag aaattgaaaa agaagaacca ggcgaagaaa agaattctga agacgtaagc 240
actgacgaca acaatgaaaa gaagaagata aggtcgggtga ttgtgaaaga gacatagagg 300
acacatgtaa ggtggaaaaat gtaagggcgg aaagtaacct tatcaciaag gaattctatc 360
ccccactact tatcctttta tttttttccg tgtcattttt gcccttgagt tttcctatat 420
aaggaaccaa gttcggcatt tgtgaaaaca agaaaaaatt tgggtgtaagc ttttttcttt 480
gaagtactga ggatacaact tcagagaaat ttgtaagttt gtagatctcg attctaga 538
atg gcc tgc acc aac aac gcc atg agg gcc ctc ttc ctc ctc gtg ctc 586
Met Ala Cys Thr Asn Ala Met Arg Ala Leu Phe Leu Leu Val Leu
  1             5             10             15

ttc tgc atc gtg cac ggc gat aag ctt atc ggt tcc tgc gtg tgg ggt 634
Phe Cys Ile Val His Gly Asp Lys Leu Ile Gly Ser Cys Val Trp Gly
      20             25             30

gct gtg aac tac act tcc gat tgc aac ggt gag tgc aag agg agg ggt 682
Ala Val Asn Tyr Thr Ser Asp Cys Asn Gly Glu Cys Lys Arg Arg Gly
      35             40             45

tac aag ggt ggt cac tgc ggt tcc ttc gct aac gtg aac tgc tgg tgc 730
Tyr Lys Gly Gly His Cys Gly Ser Phe Ala Asn Val Asn Cys Trp Cys
      50             55             60

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gag act tgactcgagg gggggcccgg taccggatcc aattcccgat cgttcaaaca 786
 Glu Thr
 65

tttggcaata aagtttctta agattgaatc ctggtgcccgg tcttgcgatg attatcatat 846
 aatttctggt gaattacgtt aagcatgtaa taattaacat gtaatgcatg acgttattta 906
 tgagatgggt ttttatgatt agagtcccgc aattatacat ttaatacgcg atagaaaaca 966
 aaatatagcg cgcaaaactag gataaattat cgcgcgcggt gtcactctatg ttactagatc 1026
 ggggatcgat 1036

<210> 21
 <211> 52
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> SYNTHETIC POLYNUCLEOTIDE

<400> 21
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<210> 22
 <211> 56
 <212> DNA
 <213> Artificial Sequence

<220>
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<400> 22
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<210> 23
 <211> 52
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> SYNTHETIC POLYNUCLEOTIDE

<400> 23
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<210> 24
 <211> 52
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> SYNTHETIC POLYNUCLEOTIDE

<400> 24
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<210> 25
<211> 56
<212> DNA
<213> Artificial Sequence

<220>
<223> SYNTHETIC POLYNUCLEOTIDE

<400> 25
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<210> 26
<211> 52
<212> DNA
<213> Artificial Sequence

<220>
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<400> 26
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<210> 27
<211> 42
<212> DNA
<213> Artificial Sequence

<220>
<223> SYNTHETIC POLYNUCLEOTIDE

<400> 27
gatccttcgc taacgttaac tggttggtgta gaacctgata gg 42

<210> 28
<211> 42
<212> DNA
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<220>
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<400> 28
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<210> 29
<211> 32
<212> DNA
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<220>
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<400> 29

ctagtgactg caacggcgag tgcttggtgc gc

32

<210> 30

<211> 26

<212> DNA

<213> Artificial Sequence

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<223> SYNTHETIC POLYNUCLEOTIDE

<400> 30

gcaacaagca ctgccggttg cagtca

26

<210> 31

<211> 32

<212> DNA

<213> Artificial Sequence

<220>

<223> SYNTHETIC POLYNUCLEOTIDE

<400> 31

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32

<210> 32

<211> 26

<212> DNA

<213> Artificial Sequence

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<223> SYNTHETIC POLYNUCLEOTIDE

<400> 32

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26

<210> 33

<211> 40

<212> DNA

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<400> 33

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<210> 34

<211> 18

<212> DNA

<213> Artificial Sequence

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<223> SYNTHETIC POLYNUCLEOTIDE

<400> 34

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<210> 35

<211> 22

<212> DNA

<213> Artificial Sequence

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<223> SYNTHETIC POLYNUCLEOTIDE

<400> 35

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22

<210> 36

<211> 36

<212> DNA

<213> Artificial Sequence

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<223> SYNTHETIC POLYNUCLEOTIDE

<400> 36

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36

<210> 37

<211> 32

<212> DNA

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<223> SYNTHETIC POLYNUCLEOTIDE

<400> 37

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<210> 38

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> SYNTHETIC POLYNUCLEOTIDE

<400> 38

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